

97
SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO:45.--.

As indicated under Item No. 9 on the Notice to File Missing Parts of Application - Filing Date Granted, please correct the claims that are misnumbered starting after Claim 44. In this regard, please make the following corrections:

45 [42]. (amended) A method of detecting a cancer, said method comprising detecting the overexpression of a protein encoded in a 20q13 amplicon.

46 [43]. (amended) The method of claim 45 [41], wherein said protein encoded in a 20q13 amplicon is ZABC1.

47 [44]. (amended) The method of claim 45 [41], wherein said protein encoded in a 20q13 amplicon is 1b1.

Please insert the accompanying Sequence Listing, pages 1-36, at the end of the application.

REMARKS

For the convenience of the Examiner, a list of pending claims is attached as Appendix I.

The renumbering of the claims following Claim 44 to new Claim Nos. 45-47 present no new matter. The correction to Claim 15 merely corrects a typographical error.

Applicants request entry of this amendment in adherence with 37 C.F.R. §§1.821 to 1.825. This amendment is accompanied by a floppy disk containing the above named sequences, SEQ ID NOs:1-55, in computer readable form, and a paper copy of the sequence information which has been printed from the floppy disk.

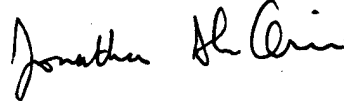
The information contained in the computer readable disk was prepared through the use of the software program "PatentIn" and is identical to that of the paper copy. This amendment contains no new matter.

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PATENT

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,



Jonathan A. Quine
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Enclosure
Appendix I

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APPENDIX I

WHAT IS CLAIMED IS:

1 1. (amended) An isolated nucleic acid molecule comprising a
2 polynucleotide sequence having a subsequence which specifically hybridizes under
3 stringent conditions to a sequence selected from the group consisting of SEQ ID NO:2,
4 SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ
5 ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:12, and SEQ ID NO:45.

1 2. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:2.

1 3. (amended) The isolated nucleic acid of claim 2, wherein the
2 subsequence is SEQ ID NO:2.

1 4. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes to SEQ ID NO:3.

1 5. (amended) The isolated nucleic acid of claim 4, wherein the
2 polynucleotide is SEQ ID NO:3.

1 6. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:4.

1 7. (amended) The isolated nucleic acid of claim 6, wherein the
2 subsequence is SEQ ID NO:4.

1 8. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:5.

1 9. (amended) The isolated nucleic acid of claim 8, wherein the
2 subsequence is SEQ ID NO:5.

1 10. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:6.

1 11. (amended) The isolated nucleic acid of claim 10, wherein the
2 subsequence is SEQ ID NO:6.

1 12. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:7.

1 13. (amended) The isolated nucleic acid of claim 12, wherein the
2 subsequence is SEQ ID NO:7.

1 14. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:8.

1 15. (amended) The isolated nucleic acid of claim 14, wherein the
2 subsequence is SEQ ID NO:8.

1 16. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:9.

1 17. (amended) The isolated nucleic acid of claim 16, wherein the
2 subsequence is SEQ ID NO:9.

1 18. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:10.

1 19. (amended) The isolated nucleic acid of claim 18, wherein the
2 subsequence is SEQ ID NO:10.

1 20. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:12.

1 21. (amended) The isolated nucleic acid of claim 20, wherein the
2 subsequence is SEQ ID NO:12.

1 22. (amended) The isolated nucleic acid of claim 1, wherein the
2 subsequence specifically hybridizes under stringent conditions to SEQ ID NO:45.

1 23. (amended) The isolated nucleic acid of claim 22, wherein the
2 subsequence is SEQ ID NO:45.

1 24. The isolated nucleic acid of claim 1, further comprising a
2 promoter sequence operably linked to the polynucleotide sequence.

1 25. The isolated nucleic acid of claim 1, which nucleic acid is a
2 cDNA molecule.

Sub B1
26. (amended) A method of screening for neoplastic cells in a sample, the method comprising:

contacting a nucleic acid sample from a human patient with a probe which hybridizes selectively to a target polynucleotide sequence comprising a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO:45 wherein the probe is contacted with the sample under conditions in which the probe hybridizes selectively with the target polynucleotide sequence to form a stable hybridization complex; and detecting the formation of a hybridization complex.

27. The method of claim 26, wherein the nucleic acid sample is from a patient with breast cancer.

28. The method of claim 26, wherein the nucleic acid sample is a metaphase spread or a interphase nucleus.

29. (amended) The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in SEQ ID NO:1.

30. (amended) The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in SEQ ID NO:2.

31. (amended) The method of claim 26, wherein the probe comprises a polynucleotide sequence as set forth in SEQ ID NO:3.

1 32. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:4.

1 33. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:5.

1 34. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:6.

1 35. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:7.

1 36. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:8.

1 37. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:9.

1 38. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:10.

1 39. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:12.

1 40. (amended) The method of claim 26, wherein the probe comprises
2 a polynucleotide sequence as set forth in SEQ ID NO:45.

1 41. The method of claim 26, wherein the probe is used to identify
2 the presence of a mutation in the target polynucleotide sequence.

1 42. (amended) A method for detecting a neoplastic cell in a
2 biological sample, the method comprising:

3 contacting the sample with an antibody that specifically binds a
4 polypeptide antigen encoded by a polynucleotide sequence comprising a sequence
5 selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3,
6 SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ
7 ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, and SEQ ID NO:45; and

8
9 detecting the formation of an antigen-antibody complex.

1 43. The method of claim 42, wherein the sample is from breast
2 tissue.

1 44. (amended) A method of inhibiting the pathological proliferation
2 of cancer cells, the method comprising inhibiting the activity of a gene product of an
3 endogenous gene having a subsequence which hybridizes under stringent conditions
4 to a sequence selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2,
5 SEQ ID NO:3, SEQ ID NO:4, SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ
6 ID NO:8, SEQ ID NO:9, SEQ ID NO:10, SEQ ID NO:11, SEQ ID NO:12, and SEQ
7 ID NO:45..

1 45. (amended) A method of detecting a cancer, said method
2 comprising detecting the overexpression of a protein encoded in a 20q13 amplicon.

Courtesy Copy of Pending Claims for Examiner
May 16, 1997
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1 46. (amended) The method of claim 45, wherein said protein
2 encoded in a 20q13 amplicon is ZABC1.

1 47. (amended) The method of claim 45, wherein said protein
2 encoded in a 20q13 amplicon is 1b1.

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